



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,098	06/08/2005	Jeroen Arnoldus Leonardus Johannes Raaymakers	NL021238	1382
24737	7590	04/09/2008		
PHILIPS INTELLECTUAL PROPERTY & STANDARDS			EXAMINER	
P.O. BOX 3001			AGUSTIN, PETER VINCENT	
BRIARCLIFF MANOR, NY 10510				
			ART UNIT	PAPER NUMBER
			2627	
			MAIL DATE	DELIVERY MODE
			04/09/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/538,098

**Applicant(s)**RAAYMAKERS, JEROEN  
ARNOLDUS LEONARDUS J**Examiner**

Peter Agustin

**Art Unit**

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

**DETAILED ACTION**

1. This application is a national stage entry (371) of PCT/IB03/04989, filed November 4, 2003.
2. Claims 1-11 are currently pending.

***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Objections***

4. Claim 10 is objected to because of the following informalities:  
Claim 10, line 1: "device as claimed in claim 10" should be --device as claimed in claim 1--.  
Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claims 2-6 & 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to claims 2, 5, 6 & 8, the phrase "in particular" makes it unclear as to whether the subsequent limitations are positively recited or optional, rendering the scope of the claims indefinite.

Claims 3 & 4 are dependent upon claim 2.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 2, 7 & 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Sato (JP 03-242832 A) (please refer to the translation).

In regard to claim 1, Sato discloses a device (Figure 1) for scanning a track on a record carrier (optical disk 20), the track comprising marks representing information, the device comprising a head (optical head 22) for scanning the track and generating a read signal (RF), a read unit (inherent component that retrieves information from the RF signal, note page 2, section 2: "optical head which records or reproduces information") for retrieving the information from the read signal, a jitter detecting unit (aberration generation portion detection circuit 28) for detecting an amount of jitter in the read signal due to signal components corresponding to the marks (page 10, paragraph 1: "changes in the amount of jitters are detected"), tilt control means (slope drive mechanism 24) for compensating a tilt angle between the head and the record carrier, and wobble means (slope control amps 42 & 44) for providing a wobble signal to the tilt control means (page 10, paragraph 3: "each of the drive signals is inputted from slope control amps 42, 44 during wobbling to slope drive mechanism 24"), the jitter detecting unit being arranged for generating a tilt error signal in dependence on the amount of jitter in the read signal and the wobble signal (page 6, paragraph 1: "slope detection means used to detect the slope of the abovementioned optical head based on the frequency of the compulsory slope provided to the

abovementioned optical head and the signal jitter component detected by the abovementioned jitter detection means”; page 14, paragraph 2: “compulsory slope caused by wobbling relative to optical disk 20”), and the tilt error signal being coupled to the tilt control means for constituting a tilt control loop (as shown in Figure 1).

In regard to claim 2, Sato discloses that the wobble means is arranged for providing the wobble signal in the form of a periodical wobble signal, in particular a sinusoidal wobble signal (page 9, paragraph 1: “sine wave”).

In regard to claim 7, Sato discloses that the jitter detecting unit is arranged for generating the tilt error signal by detecting the amount of jitter in the read signal synchronously with the wobble signal (page 6, paragraph 1: “slope detection means used to detect the slope of the abovementioned optical head based on the frequency of the compulsory slope provided to the abovementioned optical head and the signal jitter component detected by the abovementioned jitter detection means”; page 14, paragraph 2: “compulsory slope caused by wobbling relative to optical disk 20”).

Claim 11 has similar limitations as claim 1; thus, it is rejected on the same ground.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato in view of Park (US 2002/0060964).

For a description of Sato, see the rejection above. Furthermore, Sato discloses: in regard to claim 9, that the device comprises a write unit (inherent component that records information to the optical disk, note page 2, section 2: “optical head which records or reproduces information”) for recording information in the track via the head. However, Sato does not disclose: in regard to claim 9, that the tilt control means is arranged for reading a part of the track in or near the track to be recorded for determining a local tilt error signal and applying the local tilt error signal during subsequent recording.

Park discloses: in regard to claim 9, a tilt control means (see “tilt controller” in Figure 1) arranged for reading a part of a track in or near a track to be recorded for determining a local tilt error signal and applying the local tilt error signal during subsequent recording (paragraph 0052: “the track center of a RE signal per one disk rotation at a point where a RF signal is the maximum or the track center of a FE signal at a point where the jitter per one disk rotation is the minimum is set as a tilt control reference”; “the tilt is compensated as the set tilt control quantity according to disk conditions in operating the disk followed by record/reproduction”).

It would have been obvious to one of ordinary skill in the art at the time of invention to have applied these teachings of Park to the device of Sato, the motivation being to detect and control tilt in a stable and correct fashion (see paragraph 0123).

11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato in view of Hosono (US 5,856,930).

For a description of Sato, see the rejection above. However, Sato does not disclose: in regard to claim 10, that the device comprises a video encoding unit for receiving video data and providing encoded video as information to be recorded.

Hosono discloses: in regard to claim 10, a video encoding unit (Figure 3, video encoding unit 27) for receiving video data (Vin) and providing encoded video as information to be recorded.

It would have been obvious to one of ordinary skill in the art at the time of invention to have used the video encoding unit of Hosono with the device of Sato, the motivation being to record high-efficiency coded digital image data (column 1, lines 7-12).

***Allowable Subject Matter***

12. Claims 3-6 & 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record alone or in combination fails to teach or suggest:

in claim 3, “wherein the device comprises drive means for rotating the record carrier at a rotation frequency and wherein the wobble means is arranged for adjusting the periodical wobble signal in dependence of the rotation frequency”;

in claim 4, “wherein the device comprises drive means for rotating the record carrier at a rotation frequency and wherein the wobble means is arranged for establishing a predefined ratio between the rotation frequency and frequency of the periodical wobble signal, the ratio being predefined for separating tilt frequency components that are indicative of the tilt angle from difference frequency components between the rotation frequency and frequency of the periodical wobble signal”; and

in claim 8, “wherein the jitter detecting unit comprises a filter unit for low pass filtering the tilt error signal, in particular the low pass filter having at least one substantially zero transfer function at a difference frequency component between the rotation frequency and frequency of the periodical wobble signal”.

Claims 5 & 6 are dependent upon base claims having allowable subject matter.

***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kamiya et al. (US 5,001,690) disclose a tilt servo circuit wherein tilt driving is made periodically in either direction by a predetermined amount.

Kashiwabara (JP 2001-023213 A) discloses a tilt control method and an optical disk device capable of stably reading out data by appropriately performing the tilt correction to the skewness generated by the face wobbling of an optical disk and suppressing the generation of jitter.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Agustin whose telephone number is 571-272-7567. The examiner can normally be reached on Monday-Thursday 8:30 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.



For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Peter Vincent Agustin/  
Patent Examiner  
Art Unit 2627